

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Aaron Walker on 3/24/2009.

Amendments to the Claims

The application has been amended as follows:

1. (currently amended) A console switch that selectively connects a terminal to a hardware port of an information processing device that has a plurality of hardware ports connected through a network, the console switch comprising:
a first unit that obtains information from the terminal, the information specifying the hardware port of the information processing device to be connected;
a second unit that refers to a predetermined database in accordance with based on the information obtained by the first unit, and establishes a connection path between the terminal and the hardware port of the information processing device;
a storage unit for storing first information corresponding to hardware ports; and
a first tuning button that exchanges said first information relating corresponding to hardware ports included in the console switch with another console switch

connected to the network, the other console switch having a second tuning button that exchanges second information relating corresponding to hardware ports included in the other console switch with the console switch; wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the first information is exchanged; wherein if the second information corresponds to less hardware ports than the first information, only the information corresponding to the number of hardware ports of the second information is exchanged; and an examining unit that determines whether transmission and reception data generated between the terminal and the hardware port of the information processing device are to be accumulated as logs based on said transmission and reception data; wherein when the first tuning button is engaged, a first tuning signal is transmitted to the other console switch; wherein when the second tuning button is engaged in response to receiving the first tuning signal, a second tuning signal is transmitted to the console switch; wherein when the first tuning button and the second tuning button are engaged, the first information and the second information are interactively exchanged between the console switch and the other console switch using a data handshake.

2. (previously presented) The console switch as claimed in claim 1, further comprising a third unit that automatically connects to each hardware port of the information processing device after activation of the console switch.
3. (previously presented) The console switch as claimed in claim 1, further comprising a fourth unit that, after activation of the console switch, obtains the MAC address and the IP address of the information processing device, associate the MAC address and the IP address of the information processing device with the information, and stores the MAC address and the IP address associated with the information in the predetermined database.
- 4.(previously presented) The console switch as claimed in claim 1, wherein, when a connection path has not yet been established between the terminal and the hardware port of the information processing device corresponding to the information obtained by the first unit, the second unit detects the IP address from the MAC address of the information processing device corresponding to the obtained information, and then establishes a connection path between the terminal and the hardware port of the information processing device.
5. (previously presented) The console switch as claimed in claim 1, further comprising a fifth unit that outputs a message to notify that a connection to the terminal has been established, when a connection path between the terminal and

the hardware port of the information processing device has been established by the second unit.

6. (previously presented) The console switch as claimed in claim 1, wherein the information includes a port number allocated to the hardware port of the information processing device, or a port name allocated to the hardware port of the information processing device.

7. (original) The console switch as claimed in claim 1, wherein the predetermined database is managed as a text file.

8. (cancelled)

9. (currently amended) The console switch as claimed in claim 1, further comprising a memory unit that stores messages to be outputted onto a screen of the terminal.

10. (currently amended) The console switch as claimed in claim 9, wherein the memory unit stores data outputted from the hardware port of the information processing device.

11. (currently amended) The console switch as claimed in claim 9, wherein the memory unit stores transmission and reception data generated between the terminal and

the hardware port of the information processing, in association with one of a date, a terminal path, user information, and a server connection path.

12. (cancelled)

13. (currently amended) A system comprising:

a terminal;

an information processing device that has a plurality of hardware ports; and

a console switch that is connected to and interposed between the terminal and the information processing device, and establishes a connection path between the terminal and a hardware port of the information processing device,

the console switch comprising:

a first unit that obtains information from the terminal, the information specifying the port of the information processing device to be connected;

a second unit that refers to a predetermined database based on in accordance with the information obtained by the first unit, and establishes a connection path between the terminal and the hardware port of the information processing device; and

a first tuning button that exchanges said first information relating corresponding to hardware ports included in the console switch with another console switch connected to the network, the other console switch having a second tuning button that exchanges second information relating

corresponding to hardware ports included in the other console switch with the console switch;

wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the first information is exchanged;

wherein if the second information corresponds to less hardware ports than the first information, only the information corresponding to the number of hardware ports of the second information is exchanged;
and

an examining unit that determines whether transmission and reception data generated between the terminal and the hardware port of the information processing device are to be accumulated as logs based on said transmission and reception data;

wherein when the first tuning button is engaged, a first tuning signal is transmitted to the other console switch;

wherein when the second tuning button is engaged in response to receiving the first tuning signal, a second tuning signal is transmitted to the console switch;

wherein when the first tuning button and the second tuning button are engaged, the first information and the second information are interactively exchanged between the console switch and the other console switch using a data handshake.

14. (original) The system as claimed in claim 13, wherein the information processing device is cascade-connected.

15. (cancelled)

16. (currently amended) A system comprising:
a first console switch; and
a second console switch that is connected to the first console switch through a network,
the first console switch and the second console switch each selectively
connecting a terminal to a hardware port of an information processing device that
has a plurality of hardware ports connected through a network,
the first console switch and the second console switch each comprising:
a first unit that obtains information from the terminal, the information specifying
the hardware port of the information processing device to be connected;
a second unit that refers to a predetermined database in accordance with the
information obtained by the first unit, and establishes a connection path
between the terminal and the hardware port of the information processing
device;
a first tuning button that exchanges said first information relating corresponding
to hardware ports included in the console switch with another console
switch connected to the network, the other console switch having a

second tuning button that exchanges second information relating corresponding to hardware ports included in the other console switch with the console switch;

wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the first information is exchanged;

wherein if the second information corresponds to less hardware ports than the first information, only the information corresponding to the number of hardware ports of the second information is exchanged;
and

an examining unit that determines whether transmission and reception data generated between the terminal and the hardware port of the information processing device are to be accumulated as logs based on said transmission and reception data;

wherein when the first tuning button is engaged, a first tuning signal is transmitted to the other console switch;

wherein when the second tuning button is engaged in response to receiving the first tuning signal, a second tuning signal is transmitted to the console switch;

wherein when the first tuning button and the second tuning button are engaged, the first information and the second information are interactively

exchanged between the console switch and the other console switch
using a data handshake.

17. (currently amended) A method of selectively connecting a terminal to a hardware port of an information processing device that has a plurality of hardware ports connected through a network, the method being executed by each of a console switch having a first tuning button and another console switch having a second tuning button, the method comprising:

obtaining information from the terminal, the information specifying the hardware port of the information processing device to be connected;
referring to a predetermined database in accordance with the obtained information, and then establishing a connection path between the terminal and the hardware port of the information processing device;

engaging a first tuning button within the console switch, and in response to the activation, transmitting a first tuning signal to another console switch;
engaging a second tuning button within the other console switch, and in response to the activation, transmitting a second tuning signal to the console switch;
examining transmission and reception data generated between the terminal and the hardware port of the information processing device to determine whether the transmission and reception data is to be accumulated as logs based on the transmission and reception data; and

exchanging first information relating corresponding to hardware ports included in the console switch with the other console switch connected to the network, the other console switch exchanging second information relating corresponding to hardware ports included in the other console switch with the console switch; wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the first information is exchanged; wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the second information is exchanged; and wherein when the first tuning button and the second tuning button are engaged, the first information and the second information are interactively exchanged between the console switch and the other console switch using a data handshake.

18. (previously presented) The method as claimed in claim 17, further comprising performing automatic connection to each hardware port of the information processing device.

19. (previously presented) The method as claimed in claim 17, further comprising obtaining the MAC address and the IP address of the information processing device, and storing the MAC address and the IP address of the information

processing device in the predetermined database, the MAC address and the IP address being associated with the information.

20. (previously presented) The method as claimed in claim 17, wherein, when a connection path has not yet been established between the terminal and the hardware port of the information processing device corresponding to the port information obtained in the information obtaining, the IP address of the information processing device is detected from the MAC address of the information processing device corresponding to the obtained information, and a connection path is then established between the terminal and the hardware port of the information processing device.

21. (previously presented) The method as claimed in claim 17, further comprising outputting a message to notify that a connection to the terminal has been established, when a connection path between the terminal and the hardware port of the information processing device has been established.

22. (previously presented) The method as claimed in claim 17, wherein the information includes a port number allocated to the hardware port of the information processing device, or a port name allocated to the hardware port of the information processing device.

23. (cancelled)

24. (cancelled)

25. (currently amended) A computer program product stored in a storage medium for causing a computer to selectively connect a terminal to a hardware port of an information processing device that has a plurality of hardware ports connected through a network, the computer having a first tuning button and another computer having a second tuning button, the program comprising: instructions for obtaining information from the terminal, the information specifying the hardware port of the information processing device to be connected; instructions for referring to a predetermined database in accordance with the obtained information, and then establishing a connection path between the terminal and the hardware port of the information processing device; instructions for examining transmission and reception data generated between the terminal and the hardware port of the information processing device to determine whether the transmission and reception data is to be accumulated as logs based on the transmission and reception data; transmitting a first tuning signal to another console switch in response to a first tuning button in the console switch being engaged; transmitting a second tuning signal to the console switch in response to a second tuning button in another console switch being engaged; and

instructions for exchanging first information relating corresponding to hardware ports

included in the console switch with the other console switch connected to the network, the other console switch exchanging second information relating corresponding to hardware ports included in the other console switch with the console switch;

wherein if the first information corresponds to less hardware ports than the second information, only the information corresponding to the number of hardware ports of the first information is exchanged;

wherein if the second information corresponds to less hardware ports than the first information, only the information corresponding to the number of hardware ports of the second information is exchanged; and

wherein when the first tuning button and the second tuning button are engaged, the first information and the second information are interactively exchanged between the console switch and the other console switch using a data handshake.

26. (previously presented) The computer program product as claimed in claim 25, further comprising instructions for performing automatic connection to each hardware port of the information processing device after activation of the computer.

27. (previously presented) The computer program product as claimed in claim 25, further comprising instructions for obtaining, after activation of the computer,

the MAC address and the IP address of the information processing device, and then storing the MAC address and the IP address of the information processing device in the predetermined database, the MAC address and the IP address being associated with the information.

28. (previously presented) The computer program product as claimed in claim 25, wherein, when a connection path has not yet been established between the terminal and the hardware port of the information processing device corresponding to the obtained port information, the IP address of the information processing device is detected from the MAC address of the information processing device corresponding to the obtained information, and then a connection path is established between the terminal and the hardware port of the information processing device.

29. (previously presented) The computer program product as claimed in claim 25, further comprising instructions for outputting a message to notify that a connection to the terminal has been established, when the connection path between the terminal and the hardware port of the information processing device has been established.

30. (previously presented) The computer program product as claimed in claim 25, wherein the information includes a port number allocated to the hardware

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port of the information processing device, or a port name associated with the hardware port of the information processing device.

31. (cancelled)

32. (cancelled)

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:
3. Applicant admitted prior art, as shown on pages 1 through 6 of the instant specification discloses a single console switch that specifies a hardware port of the information processing device to be connected, and establishes a communication path between the terminal and the hardware port of the information processing device (Specification: Figure 2).

The closest prior art of record, US 6,947,415, to Nagaraj discloses a routing table in a device. However, Nagaraj does not disclose the synchronization and logging as claimed in claim 1.

Meanwhile, US 6,505,245, to North discloses a system where information is logged based on a log field (North: Column 13, lines 22-35). However, North does not disclose that this is based in the transmission and reception data itself. Further, North does not disclose the synchronization of multiple switches, as claimed in claim 1.

Further, US 5,675,510 to Coffey discloses examining communications for specific strings, and storing information based on the strings being found (Coffey: Column 2, lines 35-50). However, Coffey does not disclose the synchronization of multiple switches, as claimed in claim 1.

Further, no other prior art of record discloses the synchronization of claim 1, such as the tuning signals being sent in accordance with claim 1 (e.g. when the first tuning button is engaged, a first tuning signal is transmitted to the other console switch and when the second tuning button is engaged in response to receiving the first tuning

signal, a second tuning signal is transmitted to the console switch), or that when both tuning signals are engaged, the information is interactively exchanged using a data handshake.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Christensen whose telephone number is (571)270-1144. The examiner can normally be reached on Monday through Thursday 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. C./
Examiner, Art Unit 2444
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